

In the Claims:

Please amend the claims as follows:

1. (currently amended) A system for determining the leakproofness of an object ~~having~~ comprising a first cavity, said system comprising:

a closed chamber ~~having~~ comprising a second cavity, ~~which~~ wherein the chamber is arranged to envelope said object within said second cavity,

an evacuator ~~evacuating means being~~ arranged to lower ~~the~~ a pressure inside one of said first cavity and second cavity with respect to ~~the~~ an ambient pressure of the chamber,

a supply of a tracer gas ~~supplying means for~~ supplying a the tracer gas into the one of said ~~cavities rendered the~~ first cavity and said second cavity having a higher pressure, wherein the tracer gas comprises hydrogen,

a detector ~~detecting means~~ being sensitive to said tracer gas, and

a supply of a transport gas other than the tracer gas ~~introduction means being~~ arranged to introduce a the transport gas ~~other than said tracer gas~~ into the one of said ~~cavities rendered~~ first cavity and said second cavity having the lower pressure, wherein said ~~evacuating means~~ evacuator is further arranged to compress arriving gas comprising the transport gas or the transport gas and the tracer gas to the ambient pressure of the chamber, and wherein said ~~detecting means~~ detector is arranged to communicate with the one of said ~~cavities rendered~~ first cavity and said second cavity having the lower pressure via the ~~evacuating means~~ evacuator and is arranged for operation at the ambient pressure of said chamber, ~~and wherein said tracer gas is~~ hydrogen.

2. (currently amended) The system according to claim 1, wherein said ~~introduction~~  
~~means~~ supply of transport gas is arranged to introduce the transport gas into the one of said  
cavities rendered the lower pressure during at least one controlled time interval.

3. (currently amended) The system according to claim 2, wherein said ~~introduction~~  
~~means~~ supply of transport gas is arranged to introduce the transport gas in a continuous flow into  
the one of said cavities rendered the lower pressure during the at least one controlled time  
interval.

4. (currently amended) The system according to claim 2, wherein said ~~introduction~~  
~~means~~ supply of transport gas is arranged to introduce a controlled amount of the transport gas  
into the one of said cavities rendered the lower pressure during a first part of the at least one  
controlled time interval.

5. (currently amended) The system according to claim 4, wherein said ~~introduction~~  
~~means~~ supply of transport gas is further arranged to introduce a continuous flow of the transport  
gas into the one of said cavities rendered the lower pressure during a second part of the at least  
one controlled time interval.

6. (currently amended) The system according to claim 4, wherein said ~~evacuating means~~  
evacuator is further arranged to evacuate tracer gas from the one of said cavities rendered the  
lower pressure towards said ~~detecting means~~ detector during an evacuation time interval.

7. (previously amended) The system according to claim 1, wherein the transport gas is air or nitrogen.

8. (previously amended) The system according to claim 1, further comprising:  
a first valve located in an inlet of the one of said cavities rendered the lower pressure and  
a second valve located in an outlet of the one of said cavities rendered the lower pressure.

9. (currently amended) The system according to claim 1, further comprising:  
a filter in an inlet ~~of the introduction means~~ for the transport gas.

10. (previously amended) The system according to claim 1, wherein said first cavity is rendered the lower pressure.

11. (previously amended) The system according to claim 1, wherein said second cavity is rendered the lower pressure.

12. (previously amended) The system according to claim 1, wherein said object is an aluminum wheel or an aluminum-alloy wheel.

13. (currently amended) A method for determining the leakproofness of an object having a first cavity, said method comprising:  
enveloping said object within a second cavity of a closed chamber,

establishing ~~by evacuating means~~ with an evacuator a lower pressure inside one of said first cavity and said second cavity with respect to ~~the~~ an ambient pressure of the chamber,

supplying a tracer gas comprising hydrogen ~~by supplying means~~ into the one of said ~~cavities~~ first cavity and said second cavity rendered the higher pressure, ~~and~~

detecting said tracer gas in the one of said ~~cavities~~ first cavity and said second cavity rendered the lower pressure with ~~detecting means~~ a detector being sensitive to said tracer gas,

prior to ~~wherein~~ detecting said tracer gas ~~is preceded by~~ introducing a transport gas other than said tracer gas into the one of said ~~cavities~~ first cavity and said second cavity rendered the lower pressure ~~by introduction means for transporting any tracer gas in the one of said cavities~~ rendered the lower pressure towards the ~~detecting means via the evacuating means~~ detector via the evacuator,

compressing gas arriving at the ~~evacuating means~~ evacuator to the ambient pressure of the chamber, the gas arriving comprising the transport gas or the transport gas and the tracer gas, and

pumping compressed gas to the ~~detecting means by the evacuating means~~ detector with the evacuator, wherein detecting said tracer gas comprises detecting at the ambient pressure of the chamber ~~and wherein the tracer gas is hydrogen~~.

14. (previously amended) The method according to claim 13, wherein introducing the transport gas into the one of said cavities rendered the lower pressure is performed during at least one controlled time interval.

15. (currently amended) The method according to claim 14, wherein introducing the

transport gas into the one of said cavities rendered the lower pressure during the at least one controlled time interval further comprises introducing the transport gas in a continuous flow for transporting tracer gas in the one of said cavities rendered the lower pressure towards said ~~detecting means~~ detector.

16. (previously amended) The method according to claim 14, wherein introducing the transport gas into the one of said cavities rendered the lower pressure during the at least one controlled time interval further comprises introducing a controlled amount of transport gas during a first part of the at least one controlled time interval for compressing accumulated tracer gas in the one of said cavities rendered the lower pressure in order to produce a short and concentrated pulse.

17. (currently amended) The method according to claim 16, wherein introducing the transport gas into the one of said cavities rendered the lower pressure during the at least one controlled time interval further comprises introducing the transport gas in a continuous flow during a second part of the at least one controlled time interval for transporting said pulse towards the ~~detecting means~~ detector.

18. (currently amended) The method according to claim 16, further comprising:  
evacuating transport gas ~~by the evacuating means~~ with the evacuator from the one of said cavities rendered the lower pressure during at least one controlled evacuation time interval for transporting said pulse towards the ~~detecting means~~ detector.

19. (previously amended) The method according to claim 13, wherein introducing a transport gas other than said tracer gas into the one of said cavities rendered the lower pressure is preceded by accumulating tracer gas in the one of said cavities rendered the lower pressure.

20. (previously amended) The method according to claim 13, wherein introducing a transport gas further comprises eliminating contaminants in the transport gas using a filter before the introduction.

21. (previously amended) The method according to claim 13, wherein establishing a lower pressure inside one of said first and second cavities comprises establishing the lower pressure in the first cavity.

22. (previously amended) The method according to claim 13, wherein establishing a lower pressure inside one of said first and second cavities comprises establishing the lower pressure in the second cavity.